

EXPRESS MAIL NO. EV335392668US

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Donald B. Axworthy et al.  
Application No. : 10/775,897  
Filed : February 10, 2004  
For : PRETARGETING METHODS AND COMPOUNDS  
Art Unit : 1642  
Docket No. : 110186.53659C23  
Date : July 30, 2004

Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents:

In accordance with 37 C.F.R. §§ 1.56 and 1.97 through 1.98, applicants wish to make known to the Patent and Trademark Office the 54 references set forth on the attached Forms PTO-1449. This application is a continuation and relies, under 35 U.S.C. § 120, on the earlier filing date of prior USAN 09/920,454, filed August 1, 2001, now issued as U.S. Patent 6,709,652; which is a continuation of USAN 08/788,339, filed January 27, 1997, now issued as U.S. Patent 6,287,536; which is a divisional of USAN 08/122,979, filed September 16, 1993, now issued as U.S. Patent No. 5,630,996; which is a 371 of PCT/US93/05406, filed June 7, 1993; which is a continuation-in-part of 07/995,381, filed December 23, 1992, now abandoned; which is a continuation-in-part of USAN 07/895,588, filed June 9, 1992, now issued as U.S. Patent No. 5,283,342. The references listed on the attached Forms PTO-1449 were submitted to and/or cited by the Patent and Trademark Office in these prior applications and, therefore, are not required to be provided in this application. If the Examiner wishes, copies will be provided upon request. As to any reference made of record on the attached Forms PTO-1449, applicants do not admit that it is "prior art" under 35 U.S.C. §§ 102 or 103, and specifically reserve the right to

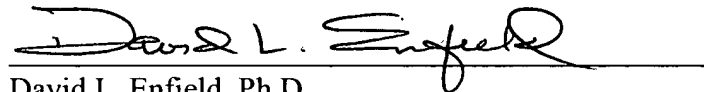
traverse or antedate any such reference, as by a showing under 37 C.F.R. § 1.131 or other method.

Although the aforesaid references are made known to the Patent and Trademark Office in compliance with applicants' duty to disclose all information they are aware of which is believed relevant to the examination of the above-identified application, applicants believe that their invention is patentable.

Please acknowledge receipt of this Information Disclosure Statement and kindly make the cited references of record in the above-identified application.

Respectfully submitted,

Seed Intellectual Property Law Group PLLC

A handwritten signature in black ink, appearing to read "David L. Enfield", is written over a horizontal line.

David L. Enfield, Ph.D.

Patent Agent

Registration No. 51,017

DLE:ljt

Enclosures:

Forms PTO-1449 (4 Sheets)

701 Fifth Avenue, Suite 6300

Seattle, Washington 98104-7092

Phone: (206) 622-4900

Fax: (206) 682-6031

\503837

FORM PTO-1449  
(REV. 7-80)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

110186.53659C23

APPLICATION NO.

10/775,897

## INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANTS

Donald B. Axworthy et al.

FILING DATE

February 10, 2004

GROUP ART UNIT

1642

## U.S. PATENT DOCUMENTS

INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AA	4,639,365	01/27/87	Sherry	424	9.363	
AB	4,647,447	03/03/87	Gries et al.	424	9.36	
AC	4,833,251	05/23/89	Musso et al.	548	304.1	
AD	4,863,713	09/05/89	Goodwin et al.	424	1.1	
AE	4,895,955	01/23/90	Ford et al.	548	304.1	
AF	4,898,951	02/06/90	Symons	548	304.1	
AG	5,141,966	08/25/92	Porath	521	32	
AH	5,256,395	10/26/93	Barbet et al.	424	1.57	
AI	5,326,778	07/05/94	Rosebrough	514	387	
AJ	5,482,698	01/09/96	Griffiths	424	1.41	

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION	
				YES	NO
AK	EP 251 494	01/07/88	EPO		
AL	EP 327 365	08/09/89	EPO		
AM	EP 451 824	10/16/91	EPO		
AN	EP 496 074	07/29/92	EPO		
AO	WO 88/08422	11/03/88	WIPO		

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AP	Axworthy et al., "Antibody Pretargeting For Radioimmunotherapy: A Three-Step Approach In Tumored Nude Mice," <i>The Journal Of Nuclear Medicine; Proceedings Of The 39<sup>th</sup> Annual Meeting</i> 33: p. 880, Abstract No. 234, 1992.
AQ	Chatterjee, <i>Cancer Immunol. Immunother.</i> 38: 75-82, 1994.
AR	Curti, <i>Crit. Rev. Oncol./Hematol.</i> 14: 29, 1993.

EXAMINER

DATE CONSIDERED

\* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

FORM PTO-1449 (REV.7-80)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. <b>110186.53659C23</b>		APPLICATION NO. <b>10/775,897</b>	
<b>INFORMATION DISCLOSURE STATEMENT</b> <i>(Use several sheets if necessary)</i>				APPLICANTS <b>Donald B. Axworthy et al.</b>			
				FILING DATE <b>February 10, 2004</b>		GROUP ART UNIT <b>1642</b>	
<b>U.S. PATENT DOCUMENTS</b>							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	BA	5,525,338	06/11/96	Goldenberg	424	178.1	
	BB	5,690,907	11/25/97	Lanza	424	9.5	
	BC	5,736,119	04/07/98	Goldenberg et al.	424	1.53	
	BD	6,120,768	09/19/00	Griffiths et al.	424	178.1	
	BE						
	BF						
	BG						
	BH						
	BI						
	BJ						
<b>FOREIGN PATENT DOCUMENTS</b>							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION		
					YES	NO	
	BK	WO 89/10140	11/02/89	WIPO			
	BL	WO 90/12050	10/18/90	WIPO			
	BM	WO 92/12730	08/06/92	WIPO			
	BN	WO 93/15210	08/05/93	WIPO			
	BO	WO 94/17829	08/18/94	WIPO			
<b>OTHER PRIOR ART</b> <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>							
	BP	Galli et al., "A Radiopharmaceutical For The Study Of The Liver: <sup>99m</sup> Tc-DTPA-ASIALO-OROSOMUCOID. II: Human Dynamic and Imaging Studies," <i>The Journal Of Nuclear Medicine And Allied Sciences</i> 32: 117-126, 1988.					
	BQ	Goldberg, CA-A Cancer Journal for Clinicians, 44:43, 1994.					
	BR	Goodwin et al., "Pharmacokinetics of Biotin-Chelate Conjugates for Pretargeted Avidin-biotin Immunoscintigraphy," <i>J. Nucl. Med.</i> : p. 880, Abstract No. 232, 1992.					
EXAMINER				DATE CONSIDERED			
* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance <u>and</u> not considered. Include copy of this form with next communication to applicant(s).							

FORM PTO-1449 (REV. 7-80)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. <b>110186.53659C23</b>		APPLICATION NO. <b>10/775,897</b>	
<b>INFORMATION DISCLOSURE STATEMENT</b> <i>(Use several sheets if necessary)</i>				APPLICANTS <b>Donald B. Axworthy et al.</b>			
				FILING DATE <b>February 10, 2004</b>		GROUP ART UNIT <b>1642</b>	
<b>U.S. PATENT DOCUMENTS</b>							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	CA						
	CB						
<b>FOREIGN PATENT DOCUMENTS</b>							
		DOCUMENT NUMBER	DATE	COUNTRY		TRANSLATION	
						YES	NO
	CC						
<b>OTHER PRIOR ART</b> <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>							
	CD	Goodwin, "New Methods for Localizing Infection: A role for Avidin-Biotin,?" <i>J. Nucl. Med.</i> 33(10): 1816-1818, 1992.					
	CE	Goodwin/Hnatowich, Letter to the Editor/Reply, <i>J. Nucl. Med.</i> 32(4): 750-751, 1991.					
	CF	Green, "The Use of [ <sup>14</sup> C]Biotin for Kinetic Studies and for Assay," <i>Biochem. J.</i> 89: 585, 1963.					
	CG	Harris et al., <i>Tibtech</i> 11: 42, 1993.					
	CH	Hnatowich et al., "Investigations of Avidin and Biotin for Imaging Applications," <i>J. Nucl. Med.</i> 28(8): 1294-1302, 1987.					
	CI	Jain, <i>Scientific American</i> 271(1): 58, 1994.					
	CJ	Jokiranta et al., "Biotinylation of Monoclonal Antibodies Prevents Their Ability to Activate the Classical Pathway of Complement," <i>The Journal of Immunology</i> 151(4): 1'14-2131, 1993.					
	CK	Kalofonos et al., "Imaging of Tumor in Patients with Indium-111-Labeled Biotin and Streptavidin-Conjugated Antibodies: Preliminary Communication," <i>J. Nucl. Med.</i> 31(11): 1791-1796, 1990.					
	CL	Koch and Macke, "99m-Tc Labeled biotin conjugates in a Tumor "Pretargeting" Approach with Monoclonal Antibodies," <i>Angew. Chem. Intl. Ed. Engl.</i> 31(11): 1507-1509, 1992.					
	CM	Kricka et al., "Survey of Methods of Measuring Human Anti-Mouse Antibodies," HAMA Survey Group, <i>Clinica Chimica Acta.</i> 215: 153-163, 1993.					
	CN	McMurry et al., "Covenient Synthesis of Bifunctional Tetraaza Macrocycles," <i>Bioconjugate Chem.</i> 3(2): 108-117, 1992.					
	CO	Osband et al., <i>Immunol. Today</i> 11: 193, 1990.					
EXAMINER				DATE CONSIDERED			
* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).							

FORM PTO-1449 (REV. 7-80)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. <b>110186.53659C23</b>		APPLICATION NO. <b>10/775,897</b>	
<b>INFORMATION DISCLOSURE STATEMENT</b> <i>(Use several sheets if necessary)</i>				APPLICANTS <b>Donald B. Axworthy et al.</b>			
				FILING DATE <b>February 10, 2004</b>		GROUP ART UNIT <b>1642</b>	
<b>U.S. PATENT DOCUMENTS</b>							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	DA						
<b>FOREIGN PATENT DOCUMENTS</b>							
		DOCUMENT NUMBER	DATE	COUNTRY		TRANSLATION	
						YES	NO
	DB						
<b>OTHER PRIOR ART</b> <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>							
	DC	Paganelli et al., "Intraperitoneal Radio-Localization of Tumors Pre-Targeted by Biotinylated Monoclonal Antibodies," <i>Int. J. Cancer</i> 45: 1184-1189, 1990.					
	DD	Paganelli et al., "Monoclonal antibody pretargeting techniques for tumour localization: the avidin-biotin system," <i>Nuclear Medicine Communications</i> 12: 211-234, 1991.					
	DE	Renn and Meares, "Large-Scale Synthesis of Bifunctional Chelating Agent 2-(p-Nitrobenzyl)-1,4,7,10-tetraazacyclododecane-N,N',N'',N'''-tetraacetic Acid, and the Determination of Its Enantiomeric Purity by Chiral Chromatography," <i>Bioconjugate Chem.</i> 3(6): 563-569, 1992.					
	DF	Rosario et al., "Bolton-Hunter and Biotin Derivatized Polylysine: A New Multi-Valent Peptide Reagent for <i>In Vivo</i> Pre-Targeting with Streptavidin Conjugates," <i>J. Nucl. Med.</i> 32(5): p. 993, Abstract No. 356, 1991.					
	DG	Rosebrough, "Plasma Stability and Pharmacokinetics of Radio-labeled Deferoxamine-Biotin derivatives," <i>J. Nucl. Med.</i> : p. 880, Abstract No. 235, 1992.					
	DH	Sanderson et al., "Preparation And Characterization Of Biotin conjugates Of Anti-Pan-Carcinoma NR-LU-10 Monoclonal Antibody For A Three Step radioimmunotherapy," <i>The Journal Of Nuclear Medicine; Proceedings Of The 39<sup>th</sup> Annual Meeting</i> 33: p. 880, Abstract No. 233, 1992.					
	DI	Van der Sluijs et al., "Drug Targeting to the Liver with Lactosylated Albumins: Does the Glycoprotein Target the Drug of is the Drug Targeting the Glycoprotein," <i>Hepatology</i> 6(4): 723-728, 1986.					
	DJ	Virzi et al., "New Indium-111 Labeled Biotin Derivatives for Improved Immunotargeting," <i>Nucl. Med. Biol.</i> 18(7): 719-726, 1991.					
	DK	Virzi et al., "The Preparation and Evaluation of 12 Biotin Derivatives labeled with Tc-99m," <i>J. Nucl. Med.</i> : p. 920, Abstract No. 403, 1992.					
	DL	Wolf et al., <i>Methy. Enzym.</i> 184: 103, 1990.					
	DM	Wu et al., "Investigations of N-Linked Macrocycles for <sup>111</sup> In and <sup>90</sup> Y Labeling of Proteins," <i>Nucl. Med. Biol. Int. J. Radiat. Appl. Instrum. Part B</i> 19(2): 239-244, 1992.					
	DN	Zwierzina, <i>StemCells</i> 11: 144, 1993.					
EXAMINER				DATE CONSIDERED			
* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance <u>and</u> not considered. Include copy of this form with next communication to applicant(s).							